

Title (en)

Cooperative geolocation based on inter-vehicular communication

Title (de)

Kooperative Geolokalisierung auf Basis der Kommunikation zwischen Fahrzeugen

Title (fr)

Géolocalisation coopérative basée sur une communication entre véhicules

Publication

EP 2124212 B1 20110112 (EN)

Application

EP 08425353 A 20080520

Priority

EP 08425353 A 20080520

Abstract (en)

[origin: EP2124212A1] Described herein is an automotive cooperative geolocation system based on inter-vehicular communication, comprising a first geolocation system (4) arranged, in use, on a first vehicle (2) equipped with an inter-vehicular communication system (3) and not equipped with an on-board geolocation system; and a second geolocation system (14) arranged, in use, on a second vehicle (11) equipped with both an both communication system (13) and an on-board geolocation system (12). The both communication systems (3, 13) are configured to automatically detect other inter-vehicular communication systems in their own communication ranges and to short-range communicate with the detected inter-vehicular communication systems, and the first and second geolocation systems (4, 14) are configured to cooperate with one another for geolocating an event detected by the first geolocation system (4). The first geolocation system (4) comprises an event detection unit (5, 6) configured to enable events that have occurred along the path of the first vehicle to be detected and identified; a measurement unit (7) configured to supply information indicating a distance covered by the first vehicle (2) from a detected event; and an electronic processing and control unit (8) configured to generate and transmit, through the inter-vehicular communication system (3) of the first vehicle (2), information indicating a detected event and a distance covered by the first vehicle (2) from the detected event. The second geolocation system (14) comprises, instead, an electronic processing and control unit (15) configured to extract the information received by the inter-vehicular communication system (13) of the second vehicle (11) and transmitted by the inter-vehicular communication system (3) of the first vehicle (2), and to geolocate the detected event based on the distance covered by the first vehicle (2) from the detected event and the current position of the second vehicle (11) supplied by the on-board location system (12) of the latter.

IPC 8 full level

G08G 1/0967 (2006.01)

CPC (source: EP US)

G08G 1/096716 (2013.01 - EP US); **G08G 1/09675** (2013.01 - EP US); **G08G 1/096791** (2013.01 - EP US)

Cited by

EP2950278A3; CN112543957A; CN105917397A; EP3086303A4; US9786172B2; WO2019092012A1; US10759442B2; US11572075B2; WO2022041969A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2124212 A1 20091125; **EP 2124212 B1 20110112**; AT E495516 T1 20110115; DE 602008004463 D1 20110224; EP 2296125 A1 20110316; EP 2296125 B1 20120530; US 2009292459 A1 20091126; US 8635013 B2 20140121

DOCDB simple family (application)

EP 08425353 A 20080520; AT 08425353 T 20080520; DE 602008004463 T 20080520; EP 10172957 A 20080520; US 46961009 A 20090520